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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,372	05/07/2001	Michael R. Forman	20534-000500	2385

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EXAMINER

SERKE, CATHERINE

ART UNIT	PAPER NUMBER
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3763

DATE MAILED: 06/04/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicati n No.

09/851,372

Applicant(s)

FORMAN, MICHAEL R.

Examiner

Catherine Serke

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 March 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 3,4 and 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-17 and 19-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Specification***

The amendment to the specification has been entered.

The amendment to the abstract has been entered.

### ***Response to Arguments***

Applicant's arguments, have been fully considered and are persuasive. The previous rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection has been made.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(f) he did not himself invent the subject matter sought to be patented.

Claims 1,8-17 and 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Hastings et al (US Pat# 5,951,458).

Hastings discloses a local application of oxidizing agents and radiation to prevent restenosis. The device includes a catheter body having a proximal end and a distal end (see figure 15). An ionizing radiation source (see 13:50-65) is coupleable to the catheter body within a balloon for applying a radiation dose to a body lumen. Means including infusion holes (372), hydrogel (matrix) coated balloons, or a microporous balloon are coupleable to the catheter body for releasing a therapeutic agent. The therapeutic agent is capable of being a radiosensitizer. The radiation and drug delivery catheter is used to inhibit hyperplasia (see summary). It is considered inherent that the hydrogel coating is a rate controlling material that releases the agent through diffusion, degradation of the matrix and from pores in the material. The device also includes a helical balloon (perfusion threading) to allow for blood flow through the treatment area.

Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Forman et al (US Pat# 6,390,967).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Forman discloses a radiation catheter for inhibiting hyperplasia after intravascular intervention that includes a catheter body having a proximal end and a distal end (see figure 6A). An ionizing radiation source (22" ; x-ray) is coupleable to the catheter body for applying a

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radiation dose to the body lumen. Means for releasing (46) are coupleable to the catheter body.

The means are capable of releasing a radiosensitizer to the body lumen.

Claims 1-2 are rejected under 35 U.S.C. 102(f) because the applicant did not invent the claimed subject matter. The prior art (Forman et al '967) discloses the invention as claimed and includes inventors in addition to the inventor of the instant application. Hence, the device in claims 1 and 2 was derived from the invention of the inventive entity (the three inventors) of the prior art.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hastings ('458) in view of Forman ('967).

Hastings meets the claim limitations as described above but fails to include the ionizing source being an x-ray tube. However, Forman discloses a catheter having an x-ray source and drug delivery catheter.

At the time of the invention, it would have been obvious to incorporate x-ray source of Forman into the invention of Hastings. Both devices are analogous in the art and used to prevent restenosis. Additionally, the motivation for the incorporation would have been in order to

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provide the device of Hastings with an additional source of radiation that would enhance the applicability of the device.

Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hastings ('458) or Forman ('967) in view of Tachibana et al (US Pat# 6,176,842).

Hastings and Forman both independently meet the claim limitations as described above but both fail to disclose a source of at least one radiosensitizer selected from the group listed in claim 5 and the radiosensitizer being attached or encapsulated in a lipid or surfactant carrier.

However, Tachibana discloses an ultrasound assembly for use with light activated drugs that includes the administration of taxol within a lipid carrier. The administration is for the destruction of rapidly growing tissue.

At the time of the invention, it would have been obvious to incorporate the administration of taxol within a lipid carrier into the invention of Hastings or Forman. All three devices are analogous in the art and used to treat tissue that is proliferating. The motivation for the incorporation would have been in order to enhance the application of the inventions of Hastings or Forman.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hastings ('458) or Forman ('967) in view of Tachibana et al (US Pat# 6,176,842).

Hastings or Forman in view of Tachibana meet the claim limitations as described above but fail to include incorporating taxol into a solution with polyoxyethylated castor oil and dehydrated alcohol.

At the time of the invention, it would have been obvious to incorporate taxol into a solution with polyoxyethylated castor oil and dehydrated alcohol. Tachibana teaches the use of liposomes and a solution with polyoxyethylated castor oil and dehydrated alcohol is an equivalent in the art. The motivation for the substitution would have been an obvious design choice. The disclosure of the instant application has asserted no advantage, particular purpose or solution to a problem for the inclusion of incorporating taxol into a solution with polyoxyethylated castor oil and dehydrated alcohol. Therefore the motivation for the substitution would have been to utilize readily available materials for ease of production.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-2,5-17 and 19-21 are rejected under the judicially created doctrine of double patenting over claims 1-42 of U. S. Patent No. 6,537,195 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter,

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as follows: a combination radiation and drug delivery catheter for inhibiting hyperplasia including, *inter alia*, an ionizing radiation source and means for releasing.


Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine Serke whose telephone number is 703-308-4846. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 703-308-3552. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2192.

Catherine Serke   
May 28, 2003

  
BRIAN L. CASLER  
SUPERVISORY PATENT EXAMINER  
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